# IV. TRENDS AFFECTING PUBLIC RECREATION AREAS

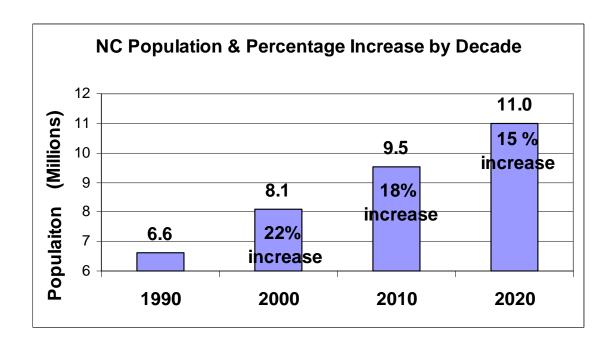
#### Introduction

Accurate predictions of changes facing North Carolina and their impact on the state and its outdoor recreation needs are important if the state is to meet those needs. Much of what citizens can do today about the future quality of life is dependent upon anticipating future trends and planning accordingly. Major trends that will affect public outdoor recreation follow.

#### **Population Growth**

From 1990-2000, the state's population grew 21.3 percent and totaled over 8 million people. The growth rate reflects the significant in-migration of people who are relocating to North Carolina. In fact, two-thirds of the growth rate is because of people moving to the state.

This trend has continued in the 21<sup>st</sup> century, with growth rates of 18 percent and 15 percent projected for the first two decades, respectively. By 2020, the state's population will have grown to nearly 11 million, up from 6.6 million in 1990. This increase of nearly 4.5 million people represents a total increase of 65 percent in 30 years. By contrast, it took 80 years, 1910 to 1990, to add 4.5 million people to the state's population.



Higher population growth is occurring in the large metropolitan areas across the state. One third of the growth in North Carolina's population this decade is the two largest counties, Mecklenburg and Wake counties. The growth in the top 10 counties, nearly 1 million people, has accounted for about two-thirds of the population increase in the state from 2000-2010.

Ten NC Counties with the Largest Increase in Population 2000-2010							
County	2000 2010 Population Population Increase		•	Percent Increase			
Wake	627,846	920,298	292,452	46.6 %			
Mecklenburg	695,370	936,874	241,504	34.7 %			
Union	123,772	207,738	83,966	67.8 %			
Guilford	421,048	480,028	58,980	14.0 %			
Johnston	121,900	171,548	49,648	40.7 %			
Cabarrus	131,063	179,365	48,302	36.9 %			
Forsyth	306,063	352,810	46,747	15.3 %			
Durham	223,314	267,086	43,772	19.6 %			
New Hanover	160,327	202,411	42,084	26.2 %			
Iredell	122,660	162,353	39,693	32.4 %			
Totals	2,933,363	3,880,511	947,148	33.4 %			

North Carolina's population has been and will continue to be among the fastest growing in the United States. In the year 2000, North Carolina ranked 11<sup>th</sup> in total population in the nation. By 2020, North Carolina is projected by the US Census Bureau to be the ninth most populous state in the nation, passing both Michigan and New Jersey.

	Most Populous States - 2000 and 2020						
	2000	2020					
Rank	State	Rank	State				
1	California	1	California				
2	Texas	2	Texas				
3	New York	3	Florida				
4	Florida	4	New York				
5	Illinois	5	Illinois				
6	Pennsylvania	6	Pennsylvania				
7	Ohio	7	Ohio				
8	Michigan	8	Georgia				
9	New Jersey	9	North Carolina				
10	Georgia	10	Michigan				
11	North Carolina	11	New Jersey				

#### **Rapid Development of Land**

Increasing population causes the landscape to change from a more rural character and become more urban. Communities at the coast and in the mountains become larger towns as retirees move into these areas. The Piedmont crescent attracts and influx of job seekers. The result is more people seeking houses, roads, and services. The changes can be seen across North Carolina.

So in the years to come, not only will more citizens be demanding outdoor recreation areas and facilities, but land available for outdoor recreation will be shrinking as development takes place to accommodate the population growth. Without an increase in recreational areas and facilities, existing ones can be expected to become increasingly crowded and negatively impacted by use and surrounding development. New areas need to be identified and steps taken to acquire them prior to their being impacted by or lost to development.

As North Carolina develops, the struggle to balance economic and population growth with the preservation of the state's natural heritage increases.

North Carolina Single-Family Building Permits							
	Number of Dwelling Units		Average Value per Dwelling Unit (Dollars)				
Year	Units	Percent Change	Value	Percent Change			
1995	47,703	-	100,100	-			
1996	51,796	9	104,600	4			
1997	55,529	7	107,800	3			
1998	62,389	12	115,800	7			
1999	64,056	3	119,700	3			
2000	59,061	-8	130,800	9			
2001	62,679	6	132,200	1			
2002	66,400	6	136,800	3			
2003	66,883	1	142,300	4			
2004	77,147	15	153,300	8			
2005	84,765	10	163,00	6			
2006	82,710	-2	177,700	9			
2007	70,339	-15	184,200	4			
Averages	65,497	4	136,031	5			

Single-family building permits have increased an average of 4 percent each year since 1995 and the rate of growth has accelerated since 2000. The increased demand for housing as well as increased affluence of residents has also increased housing prices by an average of five percent annually.

Another measure of the changing landscape is population density, people per square mile, which is increasing across the state. In 2010, North Carolina will have about 195 people per square mile. During the next 20 years, the population density for the state will increase to 255 per square mile which is an increase of over 30 percent.

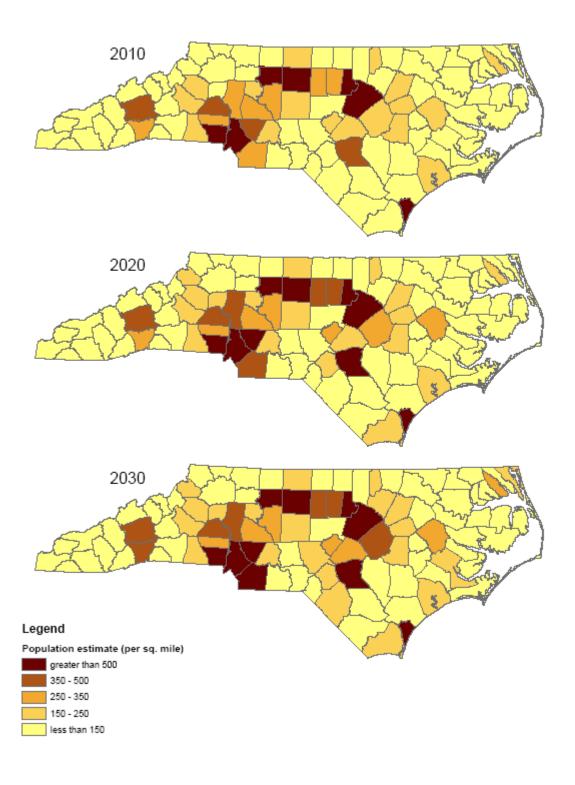


Figure II-? Population Density by County 2010 - 2030

### Longer, Healthier Lives

The North Carolina population is aging as "Baby Boomers" retire, birth rates have slowed and average life expectancy increases. The median age in the state rose from 26.5 in 1970 to 36.2 in 2000. By the year 2010, the median age is projected to rise to 38.5.

People are living longer (Table ?-?). Improved living conditions, medical discoveries, advances in healthcare and knowledge about the effects of lifestyle have all contributed to the longer lives. Questions about how long life spans can be extended through discoveries of biological research are being debated, but the trend of increased life expectancy is projected to continue. Lifestyle choices, including participating in recreation and exercise, can affect an individual's life span.

Life Expectancy at Birth, 1900-2005

	1900	1920	1940	1960	1980	2000	2005
Average	49.2	56.4	63.6	69.9	73.9	75.4	77.8
Men	47.9	49.9	57.7	65.5	70.1	71.8	75.2
Women	50.7	57.4	65.9	73.2	77.6	78.8	80.4

Source: National Vital Statistics System

Not only are lives getting longer, but they are likely to be healthier at all ages. Continued improved medical care, drug discoveries, biotechnology advances and technological innovations are expected. Even with millions more people reaching retirement age, the number of people in nursing homes declined nationwide during the 1990s, according to surveys by the Duke Center for Demographic Studies. The center also found that Medicare recipients are much less likely to be disabled than 20 years ago. Healthy people are more likely to participate in outdoor recreation. With longer and healthier lives, people are remaining active in their chosen activities longer in life, creating additional demand for outdoor recreation areas and facilities.

While the elderly participate in outdoor recreation less frequently than younger persons, they participate more frequently than in past years. An increasing interest in physical fitness and improved health has led to more participation. When higher participation rates are coupled with large increases in the over-65 age group, the elderly will demand services to a much greater degree than they do now.

Increased demand can therefore be expected for activities that have high participation by older Americans. These include walking, sightseeing, attending family gatherings, visiting a beach or waterside, picnicking, visiting a historic site or nature center, birdwatching and attending sporting events. Older Americans

also participate in a wide variety of other outdoor recreation activities including wildlife viewing, attending concerts, nature study, fishing, swimming, motor boating, biking and golf. Participation in team sports and other physically demanding activities are, as one might expect, considerably higher for the young and middle-aged than for the elderly. (National Survey on Recreation and the Environment, 2000)

#### INCREASED PARTICIPATION

In addition to population growth, outdoor recreation demand has also been fueled by increased participation. The 2002-2007 National Survey on Recreation and the Environment (NSRE) and earlier versions of the survey have documented this increase. The NSRE found that 89 percent of people age 16 and older participated in at least one activity in 1982/83; 94.5 percent in 1994/95; and 97.6 percent in 1999/2000. Some of this increase can be attributed to the longer list of activities used in the more recent surveys. Even so, it appears that participation overall is increasing. While there is little room for continued increases in the percentage of persons participating, the trend does not indicate any drop in the rate of participation. Additional recreational lands and facilities are needed to meet the additional demand created by increased participation. IV-3

North Carolina Resident Participation Number, Percent, and Percent Change by Activity Type

Activity Type	Percent participating 1995	Millions of participants 1995	Percent participating 2006	Millions of participants 2006	Percent change in # participants 1995-2006
Trail/street/road activities	66.1	3.713	85.7	5.812	56.5
Individual sports	20.2	1.137	28.2	1.913	68.2
Team sports	26.5	1.490	21.6	1.468	-1.5
Spectator activities	56.1	3.152	62.4	4.232	34.3
Viewing/learning activities	68.8	3.865	81.7	5.543	43.4
Snow/ice activities	11.8	0.662	17.9	1.212	83.1
Camping	21.8	1.226	28.7	1.949	59.0
Hunting	9.4	0.528	9.9	0.670	26.9
Fishing	26.7	1.500	36.7	2.493	66.2
Boating	28.7	1.612	31.0	2.105	30.6

Activity Type	Percent participating 1995	Millions of participants 1995	Percent participating 2006	Millions of participants 2006	Percent change in # participants 1995-2006
Swimming (natural, pool, snorkeling)	50.8	2.856	53.1	3.605	26.2
Outdoor adventure activities	33.0	1.853	51.2	3.475	87.5
Social activities	67.8	3.811	88.2	5.986	57.1

Between 1995 and 2006, every outdoor recreation activity increased except for team sports (-1.5 percent change, 21.6 percent participating). The highest percentage of participants increase occurred in outdoor adventure activities (87.5 percent change, 51.2 percent participating). Also increasing were snow/ice activities (83.1 percent change, 17.9 percent participating), and individual sports (68.2 percent change, 28.2 percent participating).

The most participated in outdoor activity is social activities with nearly 90 percent of residents participating (57.1 percent change). Roughly 2,500,000 North Carolina residents fish (66.2 percent change, 36.7 percent participating), 670,000 hunt (26.9 percent change, 9.9 percent participating), and 2,100,000 boat (30.6 percent change, 31.0 percent participating). There was more than a 25 percent increase in participation in swimming (natural, pool, snorkeling) and more than 50 percent participated in 2006.

Activities that occur on a trail, street or road had 85.7 percent of the population participating (56.5 percent change), and viewing and learning activities had 81.7 percent participating (43.4 percent change). Camping is an activity enjoyed by more than a quarter of residents (59 percent change), and spectator activities are enjoyed by roughly two-thirds of residents (34.3 percent change).

## **Activity Trends**

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Table 4.3 examine trends in North Carolina resident outdoor recreation participation by overall number participating, percent participating, and the percent change in number of participants. The 1995 data is from the 1995 NSRE survey, and the 2006 data is from the NSRE survey from 1999-2006.

Table 4.3: North Carolina Resident Participating and Percent Change by Outdoor Recreation Activity

Activity	Percent participating 1995	Millions of participants 1995	Percent participating 2006	Millions of participants 2006	Percent change in # participants 1995-2006
Snowboarding	1.0	0.055	3.1	0.211	283.6
Kayaking	1.0	0.058	3.1	0.209	260.3
Snowmobiling	0.6	0.031	1.5	0.105	238.7
View or photograph fish	11.6	0.652	26.3	1.782	173.3
Ice skating outdoors	1.2	0.066	2.1	0.139	110.6
Soccer outdoors	5.2	0.294	9.0	0.612	108.2
Jet skiing	4.9	0.273	8.0	0.545	99.6
View wildlife (besides birds)	25.6	1.438	42.0	2.848	98.1
Caving	2.6	0.144	4.2	0.283	96.5
Drive off-road	12.7	0.716	20.7	1.407	96.5
Sledding	5.3	0.295	8.0	0.544	84.4
Day hiking	20.3	1.139	29.7	2.012	76.6
Tennis outdoors	10.6	0.598	14.8	1.006	68.2
Coldwater fishing	8.3	0.468	11.5	0.781	66.9
Primitive camping	11.5	0.646	14.6	0.993	53.7
Walk for pleasure	65.4	3.673	82.0	5.564	51.5
Rafting	7.4	0.418	9.3	0.630	50.7
Warmwater fishing	20.8	1.170	25.9	1.756	50.1
View birds	27.0	1.517	33.5	2.269	49.6
Horseback riding	6.4	0.358	7.8	0.528	47.5
Bicycling	25.4	1.427	31.0	2.100	47.2

Activity	Percent participating 1995	Millions of participants 1995	Percent participating 2006	Millions of participants 2006	Percent change in # participants 1995-2006
Family gathering outdoors	61.2	3.438	74.6	5.062	47.2
Developed camping	17.2	0.969	20.5	1.392	43.7
Yard games, e.g., croquet	32.5	1.827	38.5	2.610	42.9
Picnicking	43.8	2.459	50.0	3.390	37.9
Saltwater fishing	15.0	0.842	17.0	1.156	37.3
Swimming in lakes, streams, etc.	36.1	2.031	39.7	2.695	32.7
Cross country skiing	0.9	0.050	1.0	0.066	32.0
Canoeing	6.2	0.347	6.7	0.455	31.1
Visit archeological sites	16.8	0.946	18.0	1.224	29.4
Attend outdoor sports events	45.5	2.560	48.6	3.294	28.7
Attend outdoor concerts, etc.	29.5	1.658	30.6	2.074	25.1
Visit nature centers, etc	51.1	2.870	52.9	3.587	25.0
Golfing	13.4	0.755	13.9	0.940	24.5
Mountain climbing	5.2	0.291	5.3	0.357	22.7
Running or jogging	28.7	1.612	28.3	1.923	19.3
Rowing	2.5	0.143	2.5	0.168	17.5
Motorboating	23.2	1.304	22.5	1.529	17.3
Sightseeing	54.7	3.074	52.9	3.591	16.8
Visit historic sites	44.9	2.521	43.1	2.927	16.1
Sailing	3.9	0.222	3.7	0.253	14.0
Big game hunting	7.7	0.433	7.2	0.489	12.9
Pool swimming	42.9	2.413	39.9	2.710	12.3

Activity	Percent participating 1995	Millions of participants 1995	Percent participating 2006	Millions of participants 2006	Percent change in # participants 1995-2006
Handball or racquetball outdoors	3.4	0.192	3.1	0.210	9.4
Rock climbing	2.6	0.145	2.3	0.158	9.0
Small game hunting	7.1	0.398	6.4	0.433	8.8
Orienteering	3.4	0.191	3.0	0.207	8.4
Backpacking	9.4	0.530	8.4	0.572	7.9
Anadromous fishing	3.6	0.201	3.1	0.212	5.5
Migratory bird hunting	2.1	0.118	1.7	0.116	-1.7
Downhill skiing	7.5	0.420	6.1	0.411	-2.1
Surfing	2.4	0.137	1.8	0.124	-9.5
Baseball	5.0	0.280	3.5	0.236	-15.7
Waterskiing	9.2	0.518	6.3	0.426	-17.8
Football	6.5	0.367	4.2	0.288	-21.5
Volleyball outdoors	14.9	0.835	9.0	0.614	-26.5
Snorkeling or scuba diving	7.7	0.430	4.6	0.314	-27.0
Windsurfing	0.9	0.050	0.5	0.034	-32.0
Softball	15.9	0.893	8.9	0.605	-32.3
Basketball outdoors	15.2	0.856	8.5	0.573	-33.1
Ice fishing	0.2	0.009	0.0	0.000	-100.0